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A new species of genus *Lepidiota* Kirby, 1828 from China (Coleoptera: Scarabaeidae: Melolonthidae)

Fa-Lei WANG

Yunshan Museum, Yuanyang, Chongqing 621000, P. R. China; https://orcid.org/0009-0003-9323-506X; 531609816@qq.com

Abstract: *Lepidiota yunshan* **sp. nov.** is described from Hainan Province, China. *Lepidiota acuminatops* Prokofiev, 2015 is illustrated for comparing with the new species.

Keywords: Asia, Hainan Island, Indochina, Lamellicornia, Leucopholini, taxonomy

中国鳞鳃金龟一新物种（鞘翅目：金龟科：鳃金龟科）

王法磊

云山博物馆，鸳鸯，渝北区，重庆 400000，中国

摘要：描述了产自中国海南省的一个鳞鳃金龟属新物种：云山鳞鳃金龟。并提供了膨端鳞鳃金龟的图版与新物种作对比。

关键词：亚洲，海南岛，中南半岛，鳃角类，白鳞鳃金龟族，分类学

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Introduction

The genus *Lepidiota* Kirby, 1826 belongs to the tribe Leucopholini Burmeister, 1855. There are 32 species distributed in China, Himalayan region, India, and Indochina (Krajčík 2012; Prokofiev 2015), of which eight species have previously been recorded from China: *Lepidiota acuminatops* Prokofiev, 2015 (Yunnan: Wang 2024); *L. bimaculata* (Saunders, 1839) (Hainan: Zhang 2002; Yunnan: Zhang 1992); *L. cochinchinae* Brenske, 1894 (Hainan: Prokofiev 2015, Yunnan: Wang 2024); *L. discedens* Sharp, 1876 (Yunnan: Prokofiev 2015); *L. hirsuta* Brenske, 1892 (China without detailed location: Brenske 1892); *L. nonfriedi* Brenske, 1892 (Hong Kong: Brenske 1892); *L. praecellens* Bates, 1891 (Sichuan: Bates 1891; Shanghai: Prokofiev 2015); *L. tridens* Sharp, 1876 (Sichuan: Bezděk 2016). Additionally, Prokofiev (2015) had questioned the record of *Lepidiota acuminata* Moser, 1913 from Yunnan in Keith *et al.* (2012), which he believed is actually a misidentified *L. acuminatops*.

The present study is devoted to the description of one new *Lepidiota* species of China from the Hainan Island, bringing a total number of species in this genus to nine in China.

Material and methods

The type specimen of the species described in this paper bears the following labels, separate label lines are indicated by a slash (/), and separate labels by a double slash (//): HOLOTYPE / *Lepidiota yunshan* / F.-L.Wang, 2025 // Collecting data. The materials examined in this study are housed in the Invertebrate Collection of Mianyang Normal University (**MYNU**) and Fa-Lei Wang personal collection, Chongqing, China (**WFPC**). The following specimen of *Lepidiota acuminatops* Prokofiev, 2015 was used for comparison: 1 male (WFPC): CHINA: Yunnan, Puer, Simao, Meizihu Park, 2018.V. 9–11, Jian-Yue Qiu & Hao Xu leg.

Taxonomy

Lepidiota yunshan sp. nov. 云山鳞鳃金龟

https://zoobank.org/B4FB83A3-D4ED-4C91-ADED-94CEEDC99A76

Figs 1–7

Type materials. Holotype, male (MYNU): **CHINA: Hainan Province,** Wuzhishan City, Shuiman Village, Fangtong, 2021.VI.23–24, Jian-Yue Qiu & Yu-Tang Wang leg. // HOLOTYPE / *Lepidiota yunshan* / F.-L. Wang, 2025.

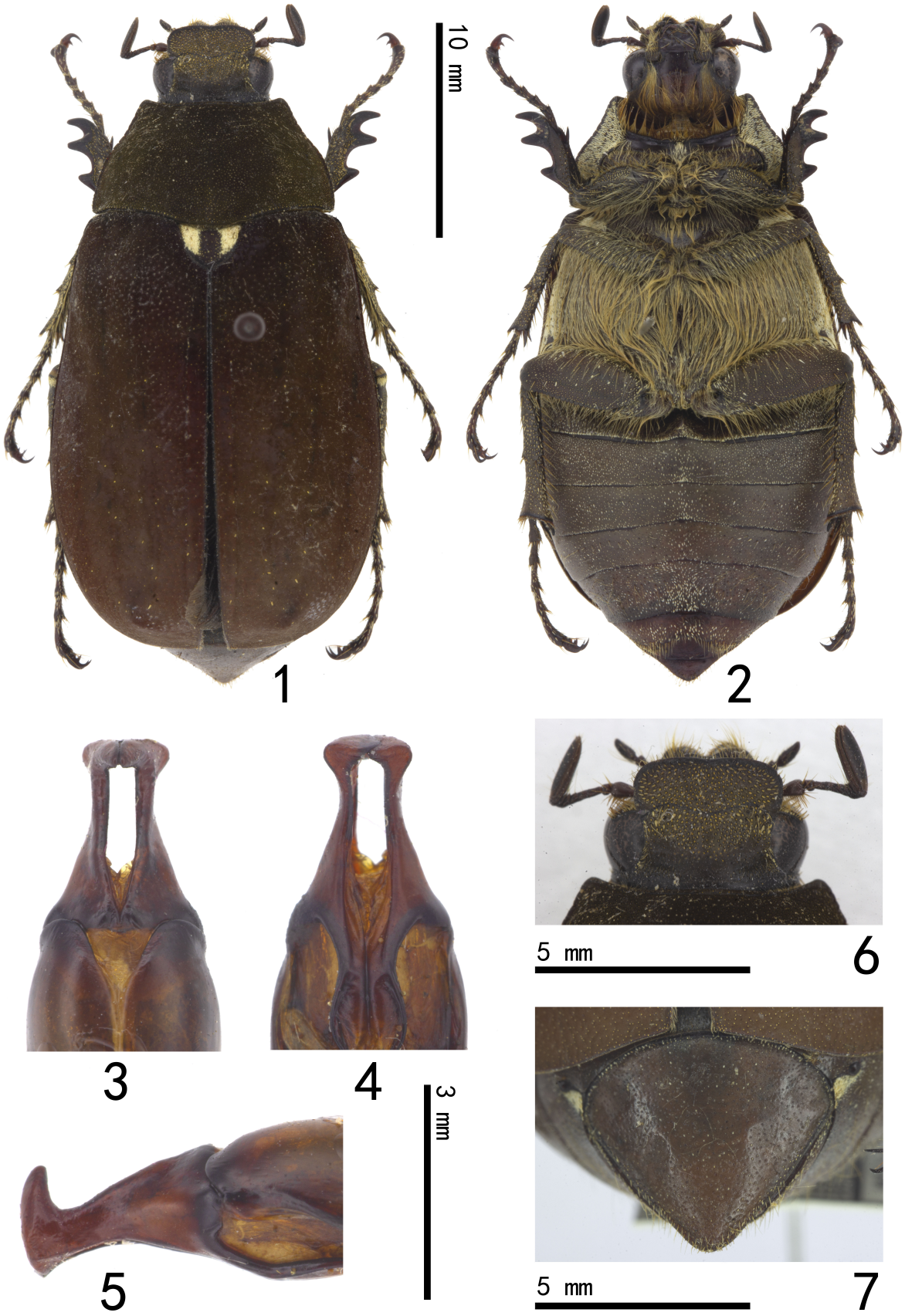
Description. Holotype, male. Habitus. Length: 33.2 mm; width: 16.1 mm. Body ovoid, rather convex.

Colour. Dorsum dichromatic, head, pronotum, and legs dark yellowish brown, scutellum and elytra dark reddish brown, basal elytra color darker. Venter brown with little shade of grey. Whole body covered with light yellow scales.

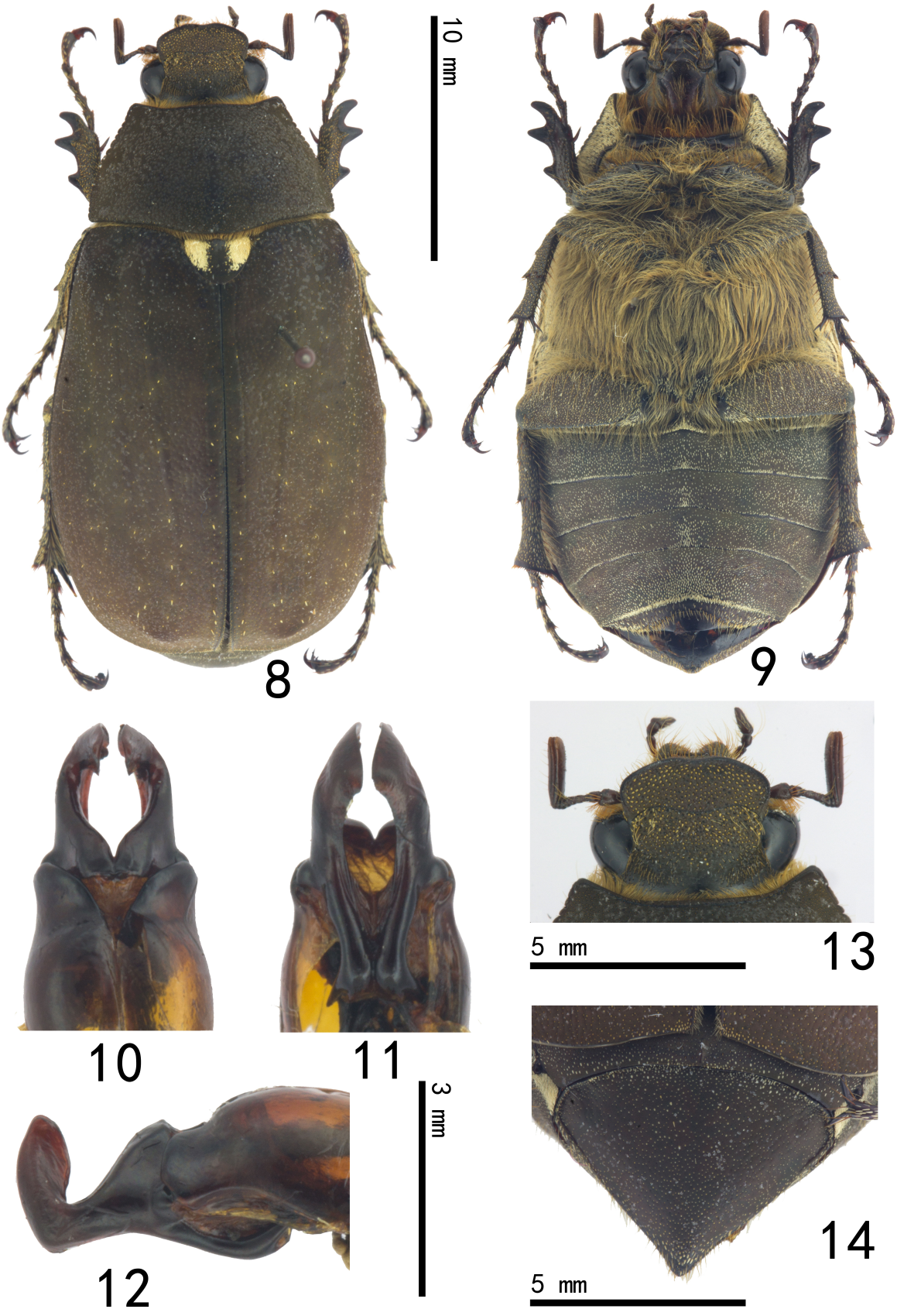
Head (Fig. 6). Clypeus broad trapezoidal, densely punctate, each puncture with a small rounded scale, scale longer on sides, anterior margin slightly incurvate, moderately reflexed. Frons with dense punctures, each puncture with a small rounded scale, several punctures on sides with larger scale. Middle area of vertex glabrous, sides with fine punctures, each puncture with a short seta. Ratio of interocular width/head width approximately 0.62. Length of antennal club (antennomeres 8–10) slightly shorter than combined length of antennomeres 1–7.

Pronotum approximately 2.01 times as wide as long, disc with moderately shallow, dense punctures, denser to the sides, each puncture with a small rounded scale. Anterior angles and posterior angles sub-rectangular, apex rounded. Lateral margins serrated, convergent in anterior 3/5, anterior 3/5 slightly incurvate. Anterior and posterior margin complete, punctures along posterior margin with larger scales.

Scutellum triangular, with the sides moderately curved, triangle area of scutellum sides with dense, elliptic white scales, broad middle longitudinal area and apex with rather sparse punctures, each puncture with a small rounded scale.



FIGURES 1–7. *Lepidiota yunshan* **sp. nov.**, holotype, male: **1, 2** habitus **3–5** male genitalia **6** head **7** pygidium. **1, 3** dorsal views **2, 4** ventral views **5** lateral view from right.



FIGURES 8–14. *Lepidiota acuminatops* Prokofiev, 2015, male, from Yunnan (China): **8, 9** habitus **10–12** male genitalia **13** head **14** pygidium. **8, 10** dorsal views **9, 11** ventral views **12** lateral view from right.

Elytra with three costae (costa 1 as sutural costa), costae 2 and 3 rather weak. Surface with dense punctures, each puncture with a small rounded scale, several punctures on costae 2 and 3 with larger elliptic scale. Humeral umbone weak, apical protrusion moderately prominent.

Pygidium (Fig. 7) triangular, apex rounded, slightly convex in profile, surface glossy, each side with dent. Surface with sparse punctures, each puncture with a small rounded scale. Apex angle with several long setae.

Abdominal ventrites densely punctate, each puncture with a small rounded scale, several ones with large elliptic scale; each ventrite with a row of setae from side to side, setae longer on ventrite IV.

Legs. Protibia tridentate, apical tooth slightly excurved and prolonged, proximal tooth acute, apex rounded, inner spur positioned opposite to middle tooth. Mesotibia and metatibia cylindrical, apex widened, surface densely and largely punctate, each puncture with a scale, inner surface with a row of long setae.

Aedeagus as Figs 3–5.

Differential diagnosis. In China, Indochina, and Himalayan region, *Lepidiota yunshan* **sp. nov.** is most similar to *Lepidiota acuminata* Moser, 1913 and *L. acuminatops* by the following combination of characters: 1) dorsal surface without reflection, slightly with velvety texture; 2) elytra sparsely punctate, each puncture with a small rounded scale, several punctures on weak costae with larger elliptic scale (Figs 1, 8); 3) triangle area of scutellum sides with dense, elliptic white scale, middle longitudinal area and apex with sparse punctures, each puncture with a small rounded scale; 4) elytra without a small patch which densely covered with scales on the area of apical protrusion. While, this new species can be distinguished from *L. acuminata* by parameres symmetric in dorsal view, and apical prominent part short and strong (parameres of *L. acuminata* asymmetric in dorsal view, and apical prominent part longer and slenderer, see Prokofiev 2015. It also can be separated from *L. acuminatops* by body color darker, anterior margin of clypeus more straight (distinct convergent in *L. acuminatops*), anterior 3/5 of pronotum lateral margin more incurvate (straight in *L. acuminatops*), apex of pygidium more rounded (more sharp in *L. acuminatops*), parameres longer and slenderer (short and stronger in *L. acuminatops*), and apex prominent part of parameres sharper (Fig. 5; rounded in *L. acuminatops*, Fig. 12).

Etymology. The new species is named after Yunshan Museum where the author work at.

Distribution. Known only from its type locality in Hainan province, southern China.

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Additional information

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